

Date: Fri, 29 Oct 93 17:59:55 PDT
From: Info-Hams Mailing List and Newsgroup <info-hams@ucsd.edu>
Errors-To: Info-Hams-Errors@UCSD.Edu
Reply-To: Info-Hams@UCSD.Edu
Precedence: Bulk
Subject: Info-Hams Digest V93 #1285
To: Info-Hams

Info-Hams Digest Fri, 29 Oct 93 Volume 93 : Issue 1285

Today's Topics:

 BAUD VS BAUDS
Bird watt-meters can't be exported?
Is the band dead -- or nobody on?
 Packet radio
 Problems with Kenwood TM-742A
 Rebuild NiCd battery for HT
 Schematic for Icom IC-701
SuperCharger Alkaline charger RVW
 Unauthorized equipment?
 VSWR Conversion chart (2 msgs)
What logging program for CQ WW DX?

Send Replies or notes for publication to: <Info-Hams@UCSD.Edu>
Send subscription requests to: <Info-Hams-REQUEST@UCSD.Edu>
Problems you can't solve otherwise to brian@ucsd.edu.

Archives of past issues of the Info-Hams Digest are available
(by FTP only) from UCSD.Edu in directory "mailarchives/info-hams".

We trust that readers are intelligent enough to realize that all text
herein consists of personal comments and does not represent the official
policies or positions of any party. Your mileage may vary. So there.

Date: 29 Oct 93 12:32:34 GMT
From: news.service.uci.edu!paris.ics.uci.edu!csulb.edu!library.ucla.edu!
europa.eng.gtefsd.com!news.umbc.edu!haven.umd.edu!cs.umd.edu!dtix.dt.navy.mil!
oasys!kstuart@network.ucsd.edu
Subject: BAUD VS BAUDS
To: info-hams@ucsd.edu

Well, someone can follow up on this comment, but when I got started
in digital, back in the 6502 era, BPS represented the number of actual
BITS being transmitted, including start and stop bits, and BAUD represented
only the number of DATA bits being transmitted. Therefore, a word format
of 8 data bits plus one start and one stop bit (10 bit total) being

sent at 100 BPS would actually have a BAUD rate of only 80.

Of course, this is assuming standard RS-232, etc.

Any comments, corrections on this? Let's hear from the group.

Of course, definitions change with time. Lotsa years ago, electrical current flowed from positive to negative. Then, in the vacuum tube era, current was redefined as the flow of electrons on a conductor, and this "reversed" the flow of current to go from negative to positive. Then, along came transistors, and current was redefined as the flow of "holes" in a conductor (or semiconductor) - so current now flowed from positive to negative once again.

And finally: today, with the massive budget cuts in the electronics industry, the flow of current has almost stopped altogether!!!

73.

Ken Stuart, W3VVN
kstuart@oasys.dt.navy.mil

Date: Thu, 28 Oct 1993 22:25:54 GMT
From: spool.mu.edu!howland.reston.ans.net!math.ohio-state.edu!
cyber2.cyberstore.ca!nntp.cs.ubc.ca!unixg.ubc.ca!acs.ucalgary.ca!cpsc.ucalgary.ca!
ajfcal!lhaven.UUmh.Ab.Ca!combdyn!@sdd.hp.com
Subject: Bird watt-meters can't be exported?
To: info-hams@ucsd.edu

In article <4724@eram.esi.COM.AU> dave@esi.COM.AU (Dave Horsfall) writes:

>So, what's with the "Not available for export" notation across the

>photo of the Bird meter in the Barry ads? Too delicate? Upsets

>someone's monopoly? Munitions? Classified equipment?

>

I often wondered about that.....

I've seen Bird wattmeters around here....infact there's a whole bunch available under surplus sales from the local phone company.

--

--EMAIL-----PHONE-----FAX-----
| WORK: lawrence@combdyn.com | (403)529-2162 | (403)529-2516 | CallSign
| HOME: dreamer@lhaven.uumh.ab.ca | (403)526-6019 | (403)529-5102 | VE6LKC

disclamer = (working_for && !representing) + (Combustion Dynamics Ltd.);

Date: 29 Oct 1993 11:53:20 -0700
From: sdd.hp.com!swrinde!emory!europa.eng.gtefsd.com!howland.reston.ans.net!
spool.mu.edu!olivea!apple.com!apple.com!not-for-mail@network.ucsd.edu
Subject: Is the band dead -- or nobody on?
To: info-hams@ucsd.edu

rdewan@casbah.acns.nwu.edu (Rajiv Dewan) writes:

>In article <1993Oct27.200502.9559@VFL.Paramax.COM>, Pete Rossi wrote:
>>I was talking to a friend about how dead the bands seemed lately - 10 meters
>>especially, yet we both noted the following:
>>
>>Why is it that the band can be open to a specific area of the world yet you
>>only hear a very few stations from that area??
>>
>>For example, the other night I was tuning around 15 meters about 9 PM local
>>time (0100Z) and it sounded pretty dead .. but then I heard this one "PY"
>>station. He has a reasonable signal but nothing else was on the band.
>>It is hard to believe that in the whole continent of South America this
>>was the only station on. I could not hear the W station he was working.

>Propagation is one of the most fascinating aspects of HF Dxing.
>The PY signal propagation is probably a case of low latitude propagation
>This is somewhat common. It may occur for a variety of reasons.

Dead bands? Just wait until 0000 UTC October 30.

I predict the phone bands would come alive at that time, although
not with intelligent QSOs :-).

Hint: see page 88 of the September 1993 CQ Magazine.

73,

Kok "5903" Chen, AA6TY kchen@apple.com
Apple Computer, Inc.

Date: 30 Oct 93 00:43:38 GMT
From: news-mail-gateway@ucsd.edu
Subject: Packet radio
To: info-hams@ucsd.edu

Could you please help me out. I found your name in a packet-radio data

base and I'm trying to find out more about this world. Am I right that packet-radio means access to the internet by connecting a computer up to a ham radio which communicates with a satellite which is somehow connected to the internet?

The reason I ask is because my brother has a computer and a ham radio and is an engineer working in third world development in Zaire, Africa. Communications are horrible there and this would be one incredible miracle if something like this could be established. If I'm on the right track, how does a person get started?

Thanks in advance for any help you can give me.

"He is no fool who gives what he cannot keep
to gain what he cannot lose." -- Jim Elliot

Larry Fountain
University of Illinois College of Medicine -- Rockford
Network Administrator, Department of Medicine
(815) 395-5645

Date: 29 Oct 93 22:12:16 GMT
From: telesoft!garym@uunet.uu.net
Subject: Problems with Kenwood TM-742A
To: info-hams@ucsd.edu

In <CFo2pq.IHo@news.iastate.edu> jdwhite@iastate.edu (Jason White) writes:
> I purchased a Kenwood TM-742A a couple weeks ago. I have noticed some
> quirks with the unit and would like to hear from other 742A owners about their
> experiences with this rig.

The first 742A I received from HRO had problems with setting CTCSS tones, I would set a 114 PL in the VFO but then when stored to memory it would change to 67 Hz. I have the TSU-7 installed and no third band (yet). HRO replaced that radio, they had to go thru 7 radios in their stock on hand to find one where the PL's worked properly and there was another customer in the store with a 742 with the same problem.

> ==> Initially, I had the 6M band unit installed as the third band. After the
> first 3 hours of use, I went into DTSS mode on the 440 band. The unit froze
> up and appeared to turn itself off.

...
> finally got into a mode where it would turn on (show "-on-" on the display)

>and then turn back off rather than display the three bands.

My 742A got into this mode after I tried to turn on the S-meter squelch mode. HRO swapped it for another unit and it works, but I'm afraid to try S-meter squelch again right now (The radio is being heavily used for RACES Fire Emergency ops right now). So I'm on my third 742 in 10 days. I'm not real impressed by Kenwood quality control at the moment.

> ==> I have noticed that the
>unit will beep and stop scanning on the 2M side, seemingly at random.

I haven't seen this happen.

>Anyone know of a mod to speed up the
>scan rate? 2 ch/sec is too darn slow!

For a radio with 100 channels per band, the scan rate is ridiculously slow.

I've redirected followups to r.r.a.equipment only.

--GaryM

--

Gary Morris KK6YB
San Diego, CA USA

Internet: garym@alsys.com
Phone: +1 619-457-2700 x128 (work)

Date: Fri, 29 Oct 1993 17:18:22 GMT
From: sdd.hp.com!math.ohio-state.edu!cyber2.cyberstore.ca!nntp.cs.ubc.ca!
newsserver.sfu.ca!sfu.ca!jjook@network.ucsd.edu
Subject: Rebuild NiCd battery for HT
To: info-hams@ucsd.edu

Hi:

Does any one has experience to rebuild the NiCd battery pack for hand held radio. I would like to make one. Can someone tell me where they can buy good NiCd battery cells and what kind of epoxy to seal the battery pack. Also, any special things you want to remind me, please do so.

Thanks

Dominic
VE7VOC

Date: 29 Oct 93 22:12:44 GMT

From: ogicse!uwm.edu!psuvax1!news.cc.swarthmore.edu!mac01.palmer.swarthmore.edu!
user@network.ucsd.edu
Subject: Schematic for Icom IC-701
To: info-hams@ucsd.edu

Does any one out there have a schematic diagram for an Icom IC-701 HF transciever? Ours is broken, and we seem to have no documentation for it, but we think that we can fix it with a schematic. Any help would be greatly appreciated, and this is for a good cause, the Swarthmore College Amateur Radio Club. If you can help me, or are intimately familiar with this rig, PLEASE contact me. Thanks.

Isaac Trefz
NJ3C

Swarthmore College
Swarthmore, Pa. 19081
(215) 692-7673
itrefz1@cc.swarthmore.edu

Date: Wed, 27 Oct 93 16:27:19 PDT
From: news.kpc.com!amd!netcomsv!micromed!brett@decwrl.dec.com
Subject: SuperCharger Alkaline charger RVW
To: info-hams@ucsd.edu

Review of the SUPER CHARGER Alkaline battery re-charger

You may have seen the info-mercial on TV starring Dick Clarke, which advertises a product called Super Charger, by Buddy L. It claims that this charger will recharge ordinary, alkaline batteries, such as Eveready, Duracell etc. The product is not related to Rayovac's new rechargeable alkaline system.

I ordered the portable model 8001 in early July, and it arrived in late October. I have heard much debate over whether alkaline chemistry can be recharged, and I was very skeptical about this product. It cost around \$40.

Construction:

The device is made in China. It appears to be fairly well made. It has a switch on the side to select either Alkaline or NiCad charging. I opened the unit up and found a 28-pin custom IC, that bears the name of Buddy L. There are some other common passive components and 4 transistors. There are 4 LEDs on the unit to tell you when each battery is finished charging ON = charging, SLOW BLINK = done FAST BLINK = battery can't be recharged

The charging scheme seems to be constant current at 14 mA. No AC component was observed on the DC output.

HOW DOES IT WORK?

TEST #1

My first test was to take some slightly used AA Energizer batteries with a starting no-load voltage of 1.4v. I put these in a 2-cell flashlight and ran it for 1 hour. The resting no-load voltage was now 1.23v. I put them in the charger and charged them up. One of cells stoped charging after 30 minutes, while the other took over an hour. The final no-load voltage of the 2 "recharged" cells was 1.27v for one of the cells and 1.33v for the other. Recharging the cells a second time did not raise the voltage any. In fact, it caused one of the cells to drop in voltage. The manual says that 1 hour in a flashlight is a pretty heavy drain, but the batteries could last "0 to 2 times longer". So maybe my test was too tough for the charger. I think the increased voltage after the charge may be no more than the natural recovery process of the batteries.

TEST #2

I took 2 AA Energizer Alkaline batteries with an initial voltage of 1.59 v. each, and placed them in my Sony portable CD player. The manual states that the batteries should last 5-8 times as long if I recharge them after each 1 hour of use. After 1 hour in the CD player they each measured 1.39v. I also put another set of batteries in the CD player and ran them for 1 hour. This second set is my control set. Instead of recharging the control set, I just let them recover on their own, for the same time as the other cells took to recharge. I repeated this process until the batteries were dead.

(all batteries were from same mfg. lot)

	(recharge) Super Charger set	(self-recovery) Control Set
Fresh Batteries	1.59 v.	1.59 v.
After 1 Hr. in CD player. . . .	1.39 v.	1.37 v.
Recharge/self-recovery (55 min)	1.44 v.	1.43 v.
Second hour in CD player. . . .	1.30 v.	1.30 v.
Recharge/self-recovery (200min)	1.44 v.	1.40 v.
Third hour in CD player	1.27 v.	1.25 v.
Recharge/self-recovery.(20 min)	1.33 v.	1.33 v.
Fourth hour in CD player. . . .	1.26 v.	1.26 v.
Recharge/self-recovery.(120min)	1.35 v.	1.34 v.
Fifth hour in CD player	1.21 v.	1.18 v.
Recharge/self-recovery.(125min)	1.33 v.	1.31 v.
Sixth hour in CD player	25 min (died)	14 min (died)

Recharge/self-recovery.(120min) 1.30 v. 1.29 v.
last run in CD player 8 min (died) 6 min (died)

THE BOTTOM LINE

Send it back! As you can see, the charger made no real difference in how long the batteries lasted. Alkaline batteries normally go up in voltage slightly when they are taken out of use (load removed). It seems that this Super Charger does nothing that the batteries won't do by themselves. Battery operated devices are normally used for portable applications. If you follow the manual, you would need to remove the batteries every few hours (or every 15 minutes for some devices) and recharge them! The inconvenience of this makes using the Super Charger a real waste of time (not to mention trying to keep track of how long you run each battery operated device). I did not test this for Nicads. \$40 for a NiCad charger is a bit steep.

Please distribute to expose this fraud

Brett Miller N70LQ @ N6LDL.#NOCAL.CA.USA.NA
brett@micromed.com

--

brett@micromed.com (brett miller)

Date: Thu, 28 Oct 1993 15:23:01 GMT
From: spsgate!mogate!newsgate!news@uunet.uu.net
Subject: Unauthorized equipment?
To: info-hams@ucsd.edu

The Newsline article that was recently posted mentions a new FCC fines structure including one for "using unauthorized equipment" (\$5000...yow!). Just what constitutes "unauthorized equipment" on the ham bands? I was under the impression that a ham could use about anything that met the regulations for spectral purity, etc.

It also mentioned \$17,500 for "being the source of malicious interference to another ham". And those fines are just for first offenses, they can be more. I hope they sock it to the idiot who's jamming nets on the local 2M repeater.

73... Mark AA7TA

Date: 29 Oct 93 23:13:02 GMT
From: ogicse!hp-cv!hp-pcd!hpcvsnz!tomb@network.ucsd.edu

Subject: VSWR Conversion chart
To: info-hams@ucsd.edu

Alan Bloom (alanb@sr.hp.com) wrote:

: For the convenience of the Internet community, I have compiled the
: following conversion chart from SWR to VSWR:

Al, could you translate that to a formula for those of us who are
graphically impaired?

;-)
Tom

Date: 29 Oct 93 10:14:17 GMT
From: ogicse!uwm.edu!spool.mu.edu!agate!apple.com!apple.com!not-for-
mail@network.ucsd.edu
Subject: VSWR Conversion chart
To: info-hams@ucsd.edu

tomb@lsid.hp.com (Tom Bruhns) writes:

>Alan Bloom (alanb@sr.hp.com) wrote:

>: For the convenience of the Internet community, I have compiled the
>: following conversion chart from SWR to VSWR:

>Al, could you translate that to a formula for those of us who are
>graphically impaired?

By inspection of Al's graph, the equation is obviously:

$$\text{VSWR} = \log(10^{**}(\text{SWR})),$$

and
$$\text{SWR} = \exp(\ln(\text{VSWR})).$$

There is a very deep philosophical meaning on why both the function
and its inverse are monotonic in nature.

The proof is trivial, but the margins of my telnet window are too
narrow for me to pass the proof along.

73,

Kok Chen, AA6TY kchen@apple.com
Apple Computer, Inc.

Date: Thu, 28 Oct 93 04:10:45 GMT
From: sequent!muncher.sequent.com!dale@uunet.uu.net
Subject: What logging program for CQ WW DX?
To: info-hams@ucsd.edu

OK, so we now have a 40 meter beam up at my friends place
and we want to spend a little time on the CQ WW DX contest
this weekend.

I have a laptop (small, running DOS) and would like a logging
program for CQWW. This laptop was previously owned by another
ham and was used on the last two field days for logging. It ran
a program designed for field day. It has fairly limited memory and
storage so I think I'm after a fairly simple program.

I would like to have someone recommend a logging program for CQWW.
Ideal would be something I could find on the QRX or 1992 Hamcall
CD ROMs as I have access to those. We are just doing this for fun
and on 40 meters only, the logging software does not have to be
the greatest in the world, just something easier than paper dupe
sheets is desired.

73, Dale.

dale@sequent.com OR uunet!sequent!dale
Dale Mosby 503-578-9842 N7PEX // Sequent Computer Systems, Inc.
15450 SW Koll Parkway // Beaverton, Or. 97006-6063

--
dale@sequent.com OR uunet!sequent!dale
Dale Mosby 503-578-9842 N7PEX // Sequent Computer Systems, Inc.
15450 SW Koll Parkway // Beaverton, Or. 97006-6063

Date: 29 Oct 93 07:09:16 GMT
From: ogicse!uwm.edu!math.ohio-state.edu!howland.reston.ans.net!agate!
kos4mac9.berkeley.edu!user@network.ucsd.edu
To: info-hams@ucsd.edu

References <2ap28h\$pj5@news.acns.nwu.edu>,
<timi-281093153936@kos4mac20.berkeley.edu>, <CFo1DM.5tI@fc.hp.com>
Subject : Re: Homonaused (Was: Newsline #842)

> Tim Ikeda (timi@mendel.berkeley.edu) wrote:
> : Genetics isn't so simple most of the time. Any single gene can have
> : multiple roles and effects on an organism's "fitness." Besides,
> : there's not likely to be any single gene that affects a particular
> : set of behaviors. Most likely, it's a combination of factors.

perry@fc.hp.com (Perry Scott) wrote:

> I am in violent agreement here. Like the discovery of Cold Fusion, I
> choose to let Science take its course. I have yet to see research done
> aimed at rebutting the claim that homosexuality is genetically
> predetermined. In the current Politically Correct environment faced by
> researchers looking for funding, I am dubious that it will happen.

The data is being evaluated very critically. Research in either direction is really not subject to PC funding control. If anything, those studies attempting to link particular human behaviors with genetics are at a historical disadvantage. The idea of a genetic basis for a behavior is strongly tainted by the stench of past abuse by the eugenics movements of the early 1900's. I've heard the gay community is split about whether a genetic component for "gayness" is a good thing or not. It's a double-edged sword for them. The trouble is that the press (as a whole, but with a few exceptions), couldn't cover this research properly if their lives depended on it. They're also terribly poor about retractions and explanations. The "discovery" the alcoholism was genetic has since gone down in flames but you probably didn't hear a peep about it in the mainstream press. My guess is that there are many behaviors for which a person's genetics predisposes them for having. However, I think that in most cases (particularly for behaviors like homosexuality or QSR'ing), the correlation will be very weak and the connections will often be tenuous.

The geneticist David Suzuki touched briefly on this subject in his recent PBS series "The Secret of Life". Richard C. Lewontin (also a respected geneticist) wrote a chapter which was critical about this research in his book "Biology as Ideology: The Doctrine of DNA" (Harper-Perennial: 1992? -- A good book and short enough to read in the bookstore if you're feeling cheap).

> In any study of genetic aspect of homosexuality, some apparent anomalies
> need to be explained. The most obvious is that homosexuals as a group
> are less likely to pass their genes to the next generation. Since the
> population appears(?) stable over time, there must be some other
> benefit that balances the reproductive disadvantage. The question then
> becomes "what are these advantages?" They must indeed be powerful, such
> as in the case of sickle-cell vs malaria.

The sickle-cell trait has very negative effects. It wouldn't be around if it didn't provide such a strong positive protection in areas rife with malaria. Homosexuality may not have such strong negative effects on reproduction, particularly if societal pressures for marriage and reproduction are stronger. The presence of a less-than-optimal effect doesn't necessarily target a gene for elimination. Besides, there's nowhere near enough information on this subject to know for sure.

> I patiently await the answers. Until then, using genetics as some sort
> of "justification" (as if it were needed) is on shaky ground.

Yes, the jury is still out.

Regards,
Tim Ikeda
timi@mendel.berkeley.edu

Date: 29 Oct 93 21:28:15 GMT
From: ogicse!uwm.edu!vixen.cso.uiuc.edu!sdd.hp.com!spool.mu.edu!news.nd.edu!
mac21@network.ucsd.edu
To: info-hams@ucsd.edu

References <1993Oct17.233220.19586@ssc.com>, <CF2wpI.vx@news.Hawaii.Edu>,
<jlrCFL2rF.4uo@netcom.com>
Subject : Re: Homonauseated (Was: Newsline #842)

In article <jlrCFL2rF.4uo@netcom.com>, jlr@netcom.com (Joe L. Reda) wrote:
>
> Just what I like to see . . being lumped in with violent criminals,
> drug pushers, rapists, etc. What century are you from? Talk about
> empty arguments . . I've heard that one before: "We love the sinner but
> we hate the sin!". Here's a consciousness-raiser for you: with the
> exception of homosexuality, all of the above behaviors are learned or
> chosen. No one *chooses* to be gay. Ever heard of genetics?

It must be nice to be omniscient. I had the distinct impression that possible genetic predispositions to violence were under investigation, but you state categorically that all such behaviors are learned or chosen, while "no one" chooses to be gay. Do you really mean to suggest such a striking disparity between the gene pools of the ancient Greeks (practically all men bisexual), modern Europeans (gay and bisexual behavior considered the exception but tolerated to various degrees), and Polynesians (gay behavior normative for many tribes during adolescence but proscribed among adults)? This sort of observation would lead me to think that homosexuality (including the various definitions of the term), like the widely differing versions of heterosexuality around the world, is a

cultural phenomenon, at least to a considerable degree (have you read Halperin's 100 Years of Homosexuality?). But what do I know, I'm not omniscient.

>

> The most ludicrous definition of 'minority' I've ever seen. Are you
> so behind the times that you think you can spot a homosexual just by
> looking at one? Gays generally don't want special hiring provisions,
> just protection from losing a job because of bigotry!

It is chiefly from my gay friends that I hear the assertion that they can "spot one from a mile away"!

>

> The REAL truth is that most folks who live in the twentieth century are
> not disgusted by the behavior of gays. They're getting more and more
> disgusted with intolerant behavior and discrimination of any form!

>

Well, there you go with this omniscience thing again. Who exactly are you talking about? People in Thailand? Saudi Arabia? China? Did it ever occur to you that assertions about "most people in the twentieth century" are bound to sound a little sweeping?

> So it's "flaunting" to want the same rights --no more or less-- than
> everyone else? Give me a break. Yeah, this topic doesn't belong here.
> It doesn't belong anywhere.

Well, just to make this relevant to the topic, allow me to restate my earlier conviction that LARC should be respected as an amateur radio organization, provided that they follow the same rules as everyone else. But I don't think that shrill and hysterical posts from EITHER side do much to shed light on the issues.

We shouldn't have to be talking about it

> because it shouldn't matter what people who mind their own business do
> with their lives as long as they harm none. But there's always those
> who think they know how everybody should live. Pardon my sounding bitter;
> I'm a little tired of 30+ years of dealing with bigoted crap.

You're welcome to be as bitter as you want to be; I just wondered whether you realized that your pretensions of knowing everything about the subject were merely bound to egg the other side on. I don't think it is a constructive stance.

>

> >Okay, lets all go over to .policy and continue the code debate
> >and discuss antenna restrictions.

>

> Joe L. Reda | Separation of Church and State -- not just a good idea,
> jlr@netcom.com | IT'S THE LAW!!

Just for the record, the separation of church and state is not the law, but a recent interpretation of the law. The constitution merely prohibits the federal government from recognizing any particular denomination as the official religion of the United States. The states were still able to have state churches under the constitution, and several actually did, for several decades into the nineteenth century.

Charles Hohenstein
N9SQE

End of Info-Hams Digest V93 #1285

